



**RXHUB<sup>SM</sup>**

*Where the Prescribing Industry Connects*



**Maryland Health Care Commission**

**February 12, 2007**

**JP Little, COO, RxHub**



## What is ePrescribing?

True ePrescribing is a two-part process that provides:

- Access to real-time clinical decision support at the point of prescribing (patient pharmacy benefit eligibility & coverage, formulary, medication history information)
- Ability to generate and route prescriptions to the patient's pharmacy of choice, whether it be a brick-and-mortar pharmacy or a mail-order pharmacy

## Why ePrescribing is Important

- Prescribing Error Rates and Quality Issues
  - More than 3.5B prescriptions are written per year (AHRQ)
  - Pharmacists make 900M calls to physicians each year to discuss possible errors or clarify prescriptions (Arthur Andersen)
  - 8.8M ADE's occur each year in ambulatory care, of which more than 3M are preventable (CITL)
  - Medication errors account for 1 out of 131 ambulatory care deaths (CITL)

## Why ePrescribing is Important

- Medication Compliance
  - Failure to refill or renew medications in a timely fashion can and does lead to ADE due to exacerbations of the condition being treated with medication
- ADE prevention and Drug Spending
  - Health plans could save between \$.75 and \$3.20 in generic usage and formulary compliance per prescription (CGE&Y, IMS Health and Allscripts)

## ePrescribing Value to Stakeholders

- **Patients** (*consumer and patient groups*)
  - ✓ Improves safety, convenience and satisfaction
  - ✓ Saves costs due to formulary compliance
- **Healthcare Providers** (*clinicians, hospitals, pharmacists, research and academic institutions, information technology vendors*)
  - ✓ Reduces time-consuming administrative issues and unnecessary re-adjudication efforts & costs
  - ✓ Optimizes therapeutic and economical drug selection
- **Healthcare Payers** (*employers, health plans, third party payers*)
  - ✓ Achieving safer outcomes and reduced adverse events and medication errors
  - ✓ Improved formulary compliance and utilization of cost-effective drugs
- **Policy Makers** (*State and Federal agencies, community-based health information exchange collaboratives, standards development organizations*)
  - ✓ Provides industry standards that reduce time, resources and confusion
  - ✓ Improves efficiency and reduces costs of health care delivery

## RxHub Overview

- Founded in 2001 as a nationwide ePrescribing information exchange network based on a payer business model
- Original founders
  - Caremark, Express Scripts, Medco
- New payers (joined in 2006)
  - WellPoint, Pharmacare, Prime Therapeutics, MedMetrics, Argus, SXC

## RxHub Services

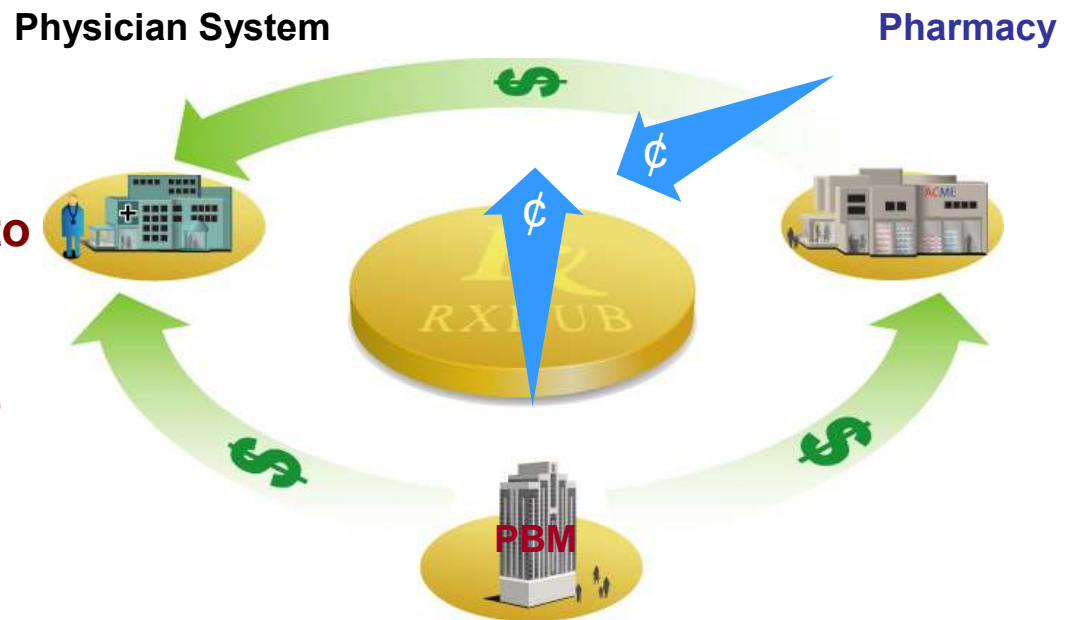
- **Master Patient Index:** Access to more than **165M** members uniquely identified using demographic elements (Name, DOB, Gender, Zip).
- **Eligibility:** Enables prescribers to access patient eligibility, benefit and coverage information for more than 5,500 health plan groups and formulary information for more than 1,600 formularies within 3 seconds. **78M** requests since 2002.
- **Medication History:** Provides PBM drug history for all coverages and includes original prescription and refills. Information can be used to indicate patient compliance, therapeutic interventions, drug-drug and drug-allergy interactions, adverse drug reactions, and duplicate therapy. **8M** requests since 2002.
- **Prescriptions:** Facilitates electronic prescribing between physicians and retail/mail order pharmacies for new and refill prescriptions. **365K** requests since 2003.

## RxHub Business Model

- **RxHub does not alter physician and patient relationships, or business relationships between payers, pharmacies, and technology vendors.**

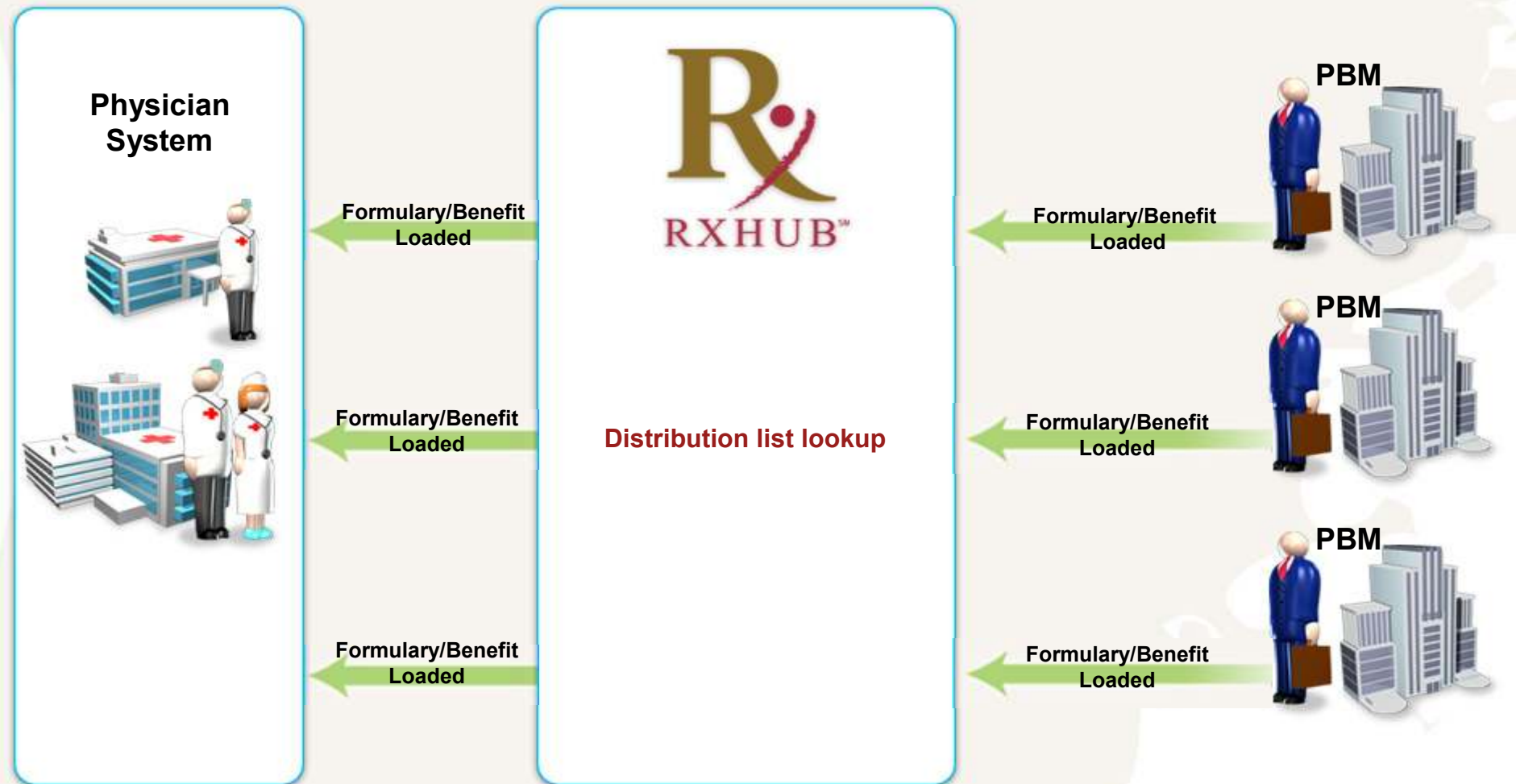
### Cost Recovery:

- Participants pay cost to operate RxHub
- As transaction volume increases, price decreases





## RxHub Transaction Workflow: Formulary and Benefits - Ambulatory



## RxHub Transaction Workflow: RxHub PRN – Ambulatory

### Physician System



Eligibility Request  
ANCX12 270

Eligibility Response  
ANCX12 271

Med History Request 1  
NCPDP SCRIPT

Med History Request 3  
NCPDP SCRIPT

Med History Response 1  
NCPDP SCRIPT

Med History Response 3  
NCPDP SCRIPT

### Locate Patient



### Aggregate Eligibility Responses

### Pass Through Med History Requests & Responses



Member ID Load 1

Eligibility Request 1

ANCX12 270

Eligibility Response 1

ANCX12 271

Med History Request 1  
NCPDP SCRIPT

Med History Response 1  
NCPDP SCRIPT

PBM 1



Member ID Load 2

PBM 2



Member ID Load 3

Eligibility Request 3

ANCX12 270

Eligibility Response 3

ANCX12 271

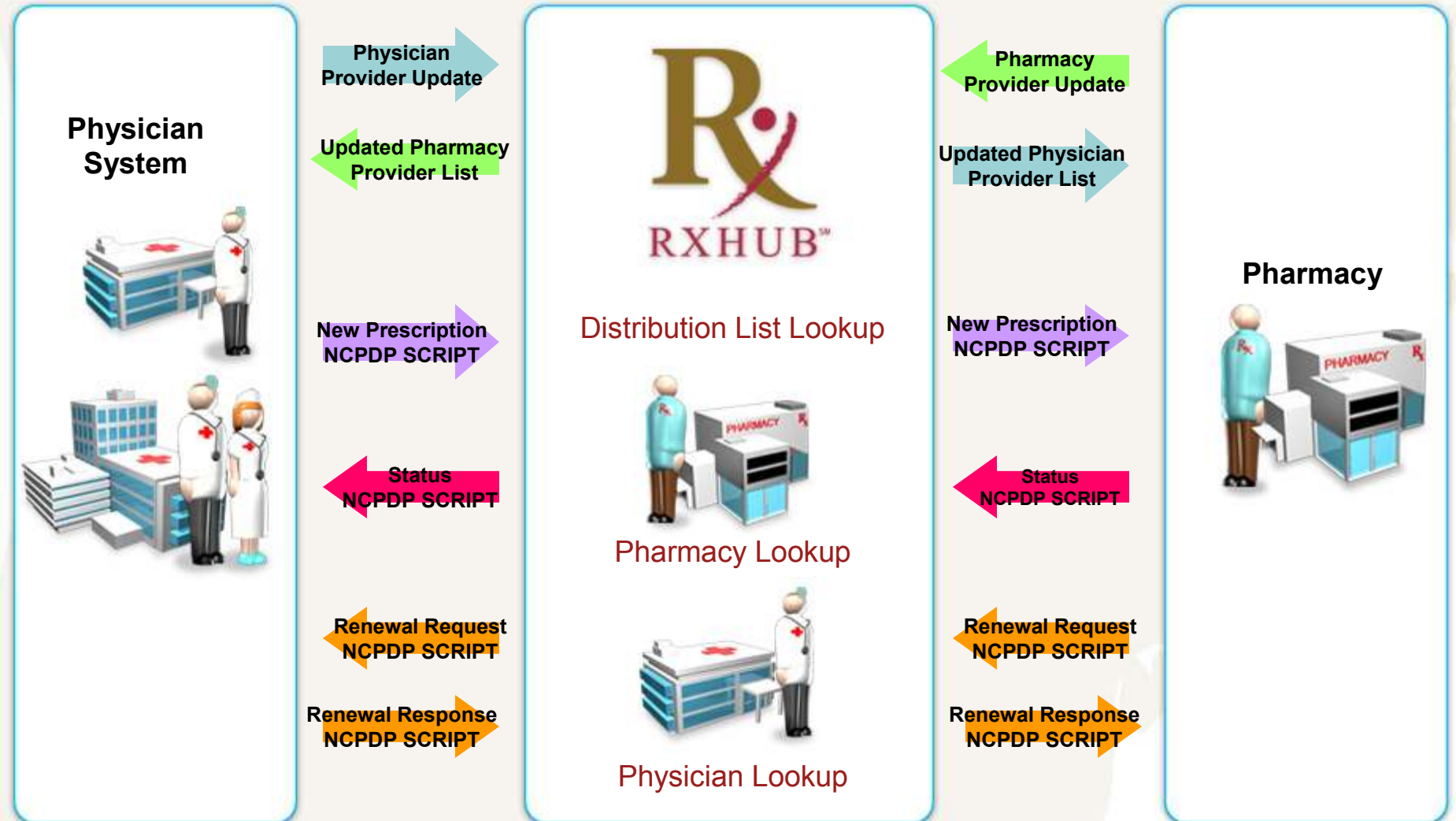
Med History Request 3  
NCPDP SCRIPT

Med History Response 3  
NCPDP SCRIPT

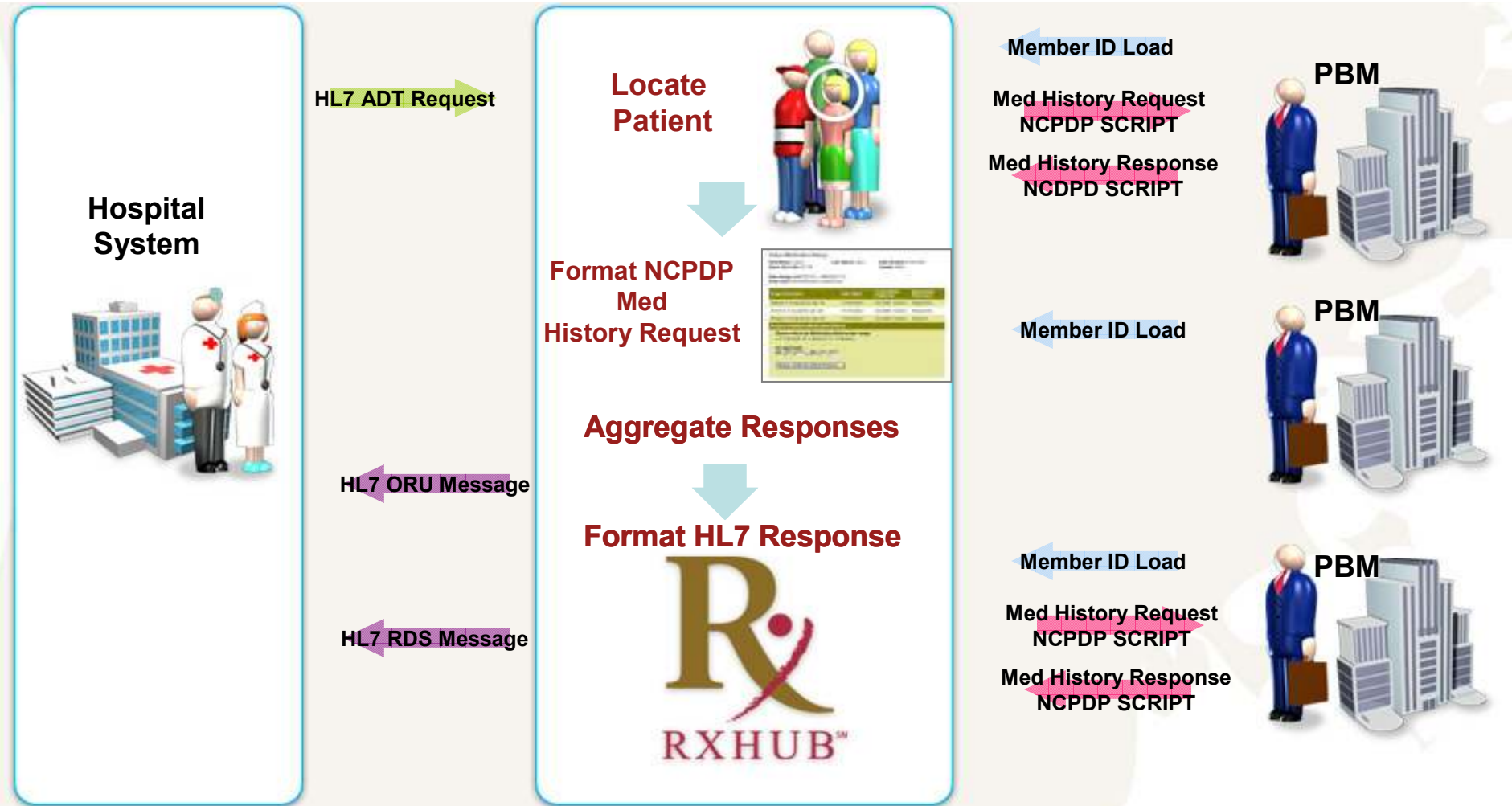
PBM 3



## RxHub Transaction Workflow: RxHub SIG – Ambulatory



## RxHub Transaction Workflow: MEDS - Acute Care

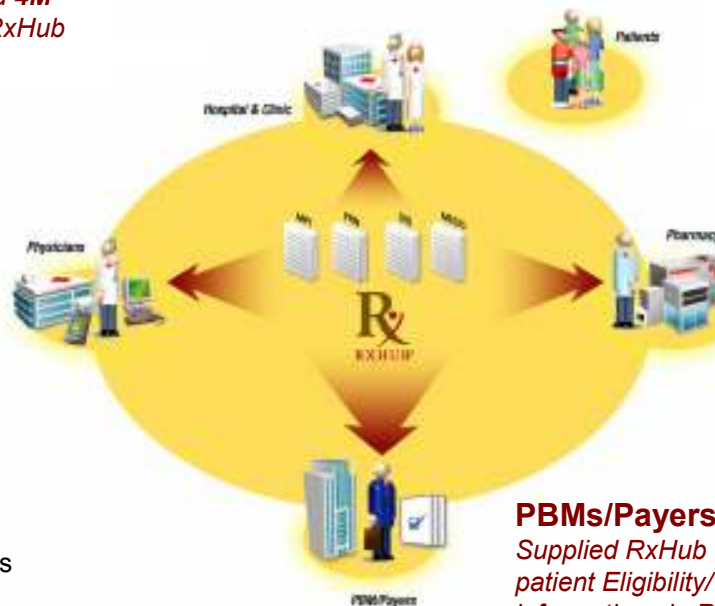


## RxHub Landscape 12/2006

### Clinics

An estimated **50K** active physicians requested **39M** patient Eligibility/Benefit requests and **4M** Medication History requests via certified RxHub PRN Technology Vendors

- Achieve Healthcare
- Allscripts
- Athena Health
- Bond Medical
- Catalis Health
- Cerner
- ChartConnect
- Community Computer
- DrFirst
- eClinical Works
- eHealth Solutions
- EPIC
- GE Healthcare
- Gold Standard
- H2H Solutions
- Health Vision
- InstantDx
- iScribe
- MA Share
- McKesson
- MDOffices
- Medical Info Sys
- MediWare
- MedKeeper
- MedPlus
- Misys Healthcare
- NewCrop
- NextGen
- OA Systems
- Phytel
- Prematics
- Pulse Systems
- Quovadx
- Regenstrief
- Relay Health
- RxNT
- RxRite
- SafeMed
- ScriptRx
- Scriptsure
- Sequel Systems
- SSIMED
- STI Computer
- Synamed
- Waiting Room Solutions
- Zix Corporation
- Zynchros



### Hospitals

Received **875K** Medication History requests via certified RxHub MEDS Technology Vendors

- DrFirst
- Healthcare Systems
- Quovadx
- Regenstrief Institute
- Siemens Healthcare

### Pharmacies

Connected to **4,170** pharmacies and processed **328K** New/Refill Prescriptions via RxHub SIG services

- Caremark Mail Order
- eRx Network
- Express Scripts Mail Services
- Medco Mail Order

### PBMs/Payers

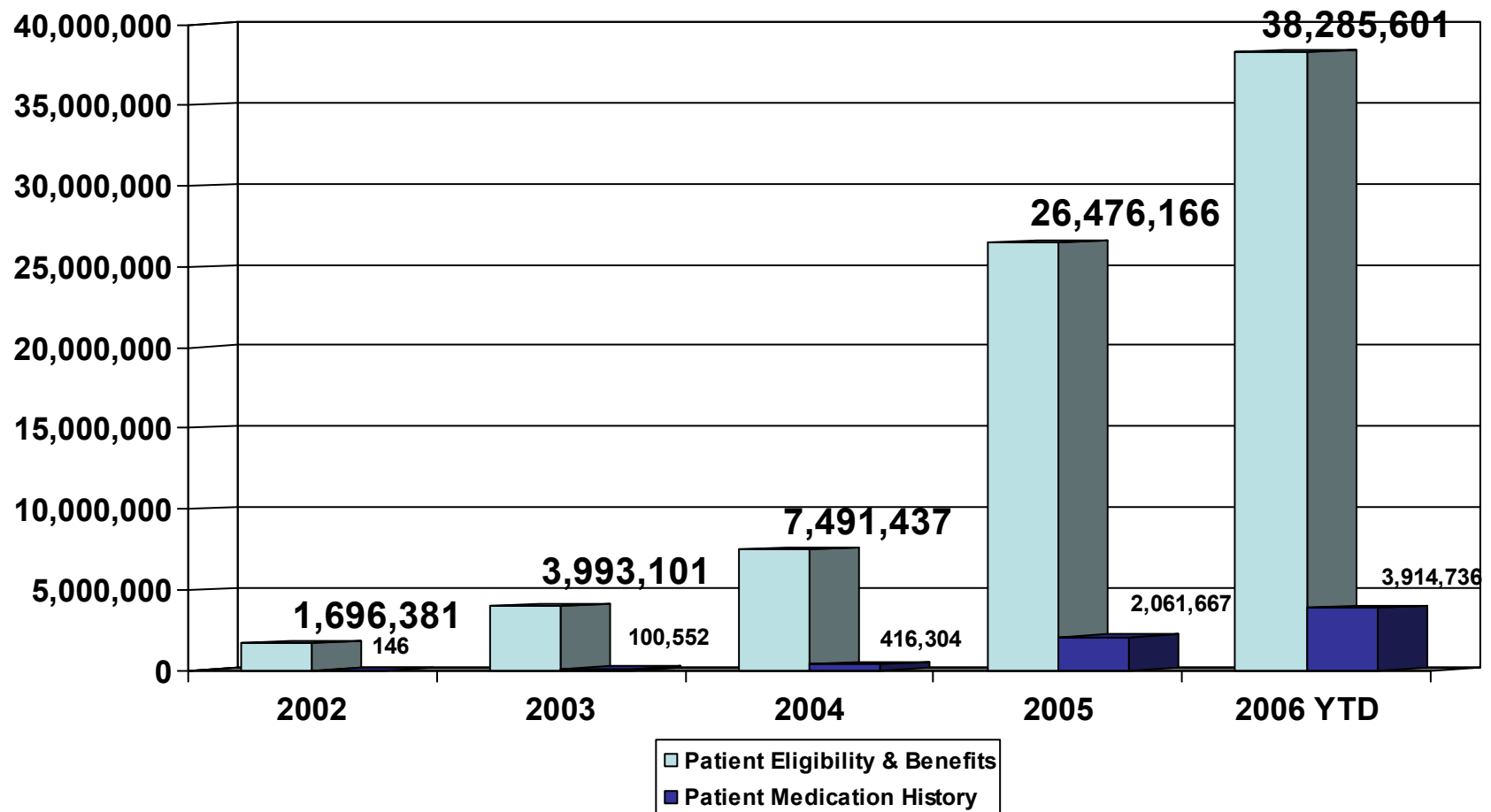
Supplied RxHub with access to more than **160M** patient Eligibility/ Benefit and Medication History information via RxHub MPI. Includes access to more than **13K** health plan groups and **1,600** formularies

- Argus
- CAQH
- Caremark
- Express Scripts
- Independent Health
- MC-21

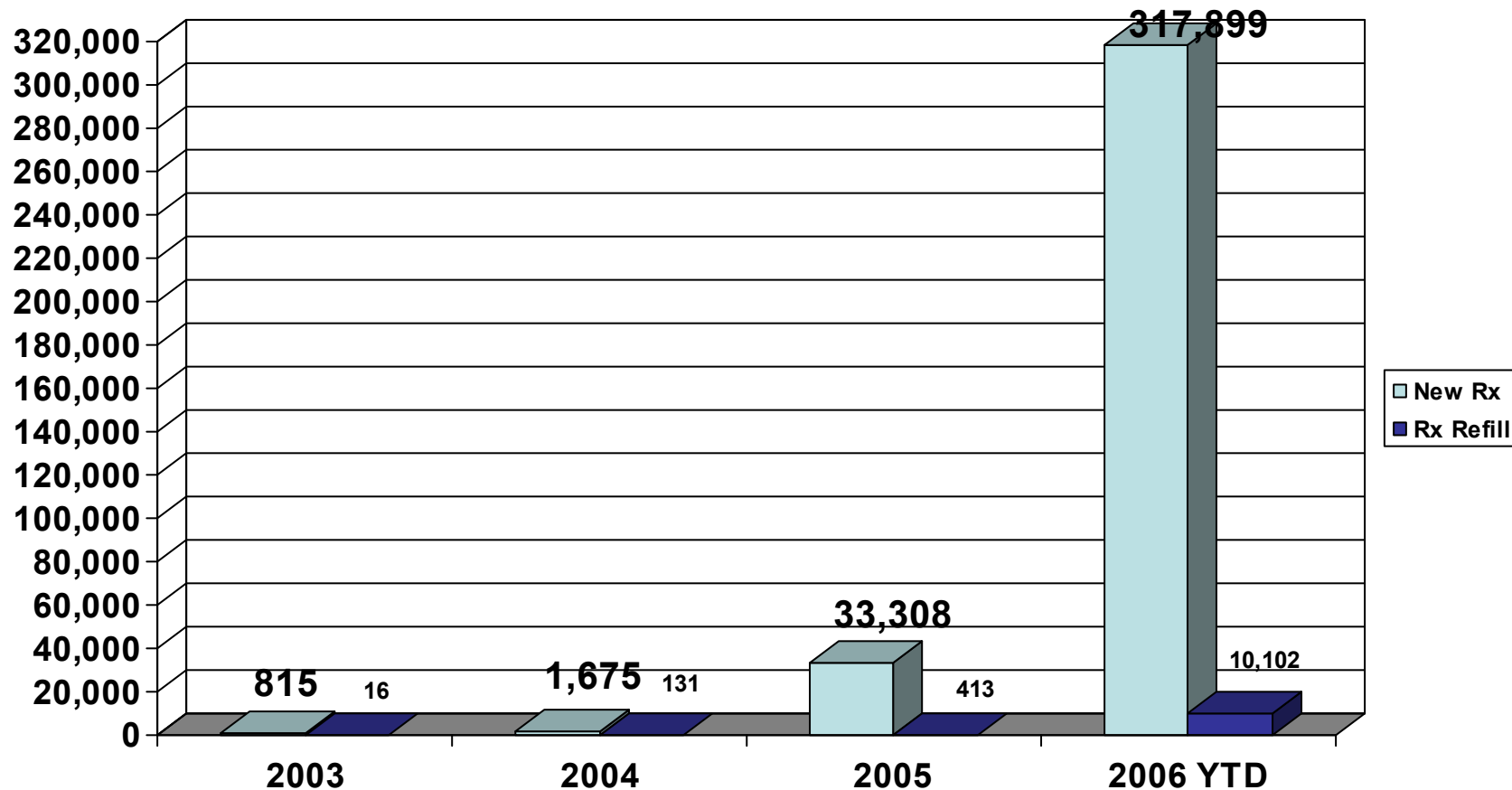
- Medco Health
- MedMetrics
- PharmaCare
- Prime Therapeutics
- SXC
- WellPoint

*Bold indicates Participant is in production*

## Ambulatory Transaction Trends

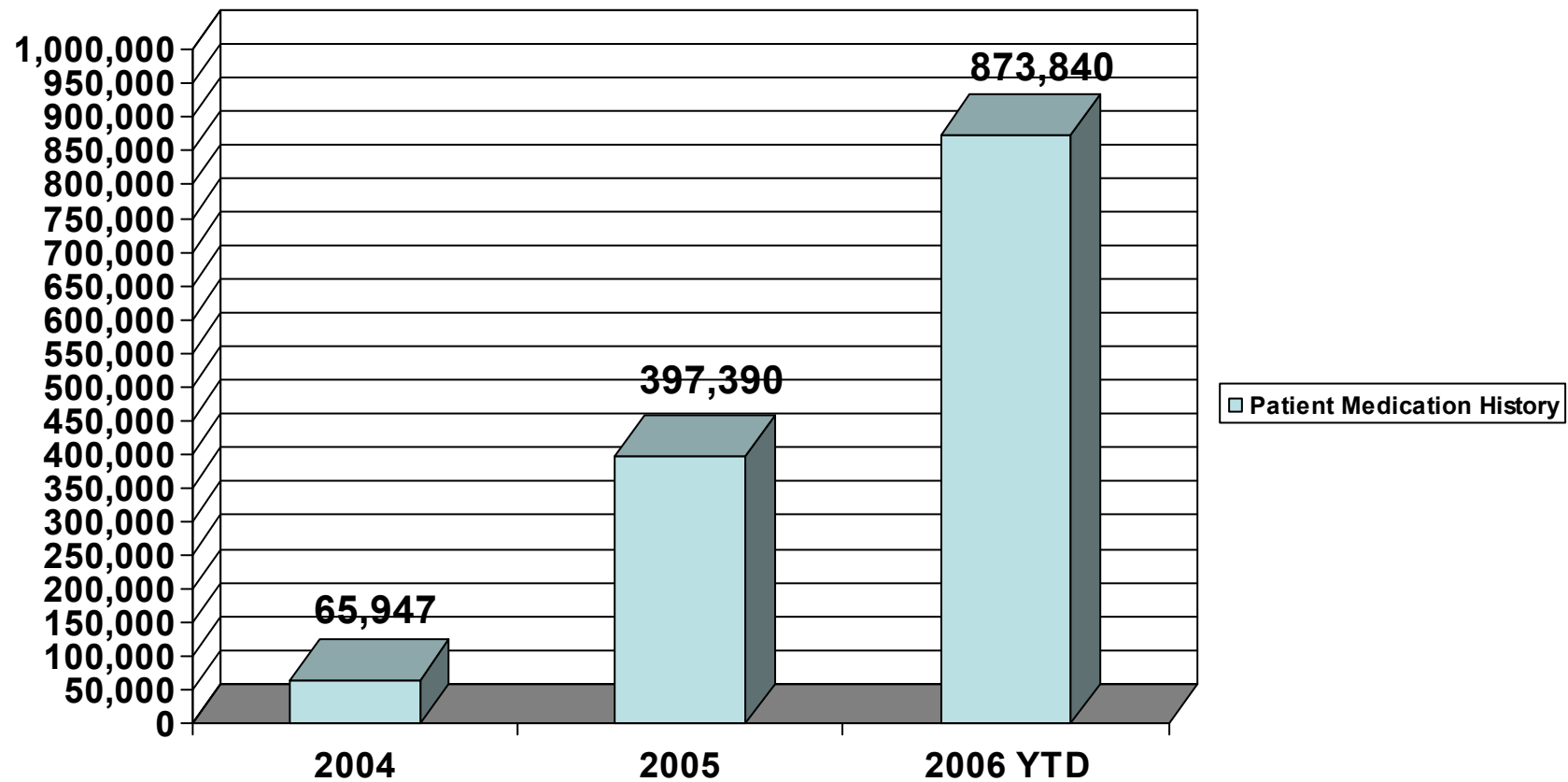


## Retail/Mail Order Prescription Transaction Trends





## Acute Care Transaction Trends





## RxHub Standards Participation

- Accredited Standards Committee (ASC X12)
- Health Information Technology Standards Panel (HITSP)
- Health Level 7 (HL7)
- National Drug Council for Prescription Drug Program (NCPDP)
- RxNorm
- Workgroup for Electronic Data Interchange (WEDI)

## RxHub Industry Participation

- 2006 Centers for Medicare & Medicaid Services (CMS) pilots
  - Achieve Health
  - Massachusetts
  - RAND
  - Ohio KePro
- 2006 Nationwide Health Information Networks (NHIN) prototypes
  - Accenture
  - CSC
  - Northrop Grumman
- American Health Information Community (AHIC)
- Health Information Technology Standards Panel (HITSP)
- Connecting for Health – Markle Foundation
- eHealth Initiative
- Hurricane Katrina relief effort
- National Alliance for Health Information Technology
- National Committee on Vital Health Statistics (NCVHS)
- United States Department of Health and Human Services (HHS)

## RxHub RHIO Initiatives

- RxHub participating in a large number of Regional Health Information Organization (RHIO) initiatives
  - SEMI
  - MA Share - RxGateway
  - IHIE/Regenstrief Institute
  - BCBS NC/NCHICA
  - BCBS NJ/ Horizon/Caremark
  - Bronx RHIO
  - THINC RHIO
  - Maryland/DC Collaborative

## RxHub Statistics – Maryland

RxHub recorded the following statistics for Maryland in 2006:

- Access to pharmacy benefit information for 4,068,470 covered lives (76.8% of state population)
- Received 43,832 requests for eligibility information. Of those requests, RxHub found 23,731 patients (54.7%) and 27,202 patient coverage's (62.7%)
- RxHub certified technology partners in Maryland:

Allscripts	MedPlus
DrFirst	NewCrop
eHealth Solutions	Prematics
Healthcare Systems	Regenstrief
Instant Dx	Relay Health
iScribe	RxNT
	Zix Corporation



**RXHUB<sup>SM</sup>**

*Where the Prescribing Industry Connects*



**Thank You**

